Focus effects on particle placement in English and the left periphery of PP

Abstract: A judgment experiment supports topic and focus effects on particle placement in English. These effects reflect movement to a PP-internal topic position parallel to that proposed for CP, DP and vP.

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Introduction

Focus: Topic/Focus effects on particle placement: given objects favor discontinuous order and foci favor continuous order (Bolinger 1971, Svenonius 1996, Kayne 1998, Dehé 2000, 2002).

(1) Q: Who will you pick up? A: I'll pick (?the girls) up (the girls).

(2) Q: How are Turid and Ingrid going to get here? A: I'll pick (the girls) up (?the girls).

Three main approaches:

1. *Extragrammatical approaches* (Svenonius 1996, Arnold et al. 2000, Bresnan & Ford 2010).

2. *VP-external Focus position* (Kayne 1998)

(3) a. $[_{WP}$ VP $[_{FocusP}$ Obj Foc <$[_{VP}$ V <Obj> Prt]>]] (Continuous orders)

b. $[_{WP}$ VP $[_{FocusP}$ Obj Foc $[_{XP}$ Prt <$[_{VP}$ V <Obj> <Prt>]>]]] (Discontinuous orders)

3. *Focus feature "binding"* (Dehé 2002): Discontinuous order triggered when defocused object is in a focus domain as in (2); elsewhere continuous order:

(4) $[_{vP}$ *turn off*$_{[+F]}$ $[_{AgrOP}$ *the camera*$_{[+F]}$ $[_{VP}$ <*turn off*$_{[+F]}$> $[_{DP}$ <*the camera*$_{[+F]}$>]]]] (Contin.)

(5) $[_{vP}$ *turn*$_{[+F]}$ $[_{AgrOP}$ *the camera*$_{[-F]}$ $[_{VP}$ <*turn*$_{[+F]}$ >*off*$_{[+F]}$ $[_{DP}$ <*the camera*$_{[-F]}$>]]]] (Discont.)

A judgment experiment

Subjects: 125 native speaker Queens College undergrads ,91 ♀, 34 ♂.

Materials: 2x4 design crossing focus bias and word order: 4 judgments/condition/subj.

(6) Q: What happened? A: Ann cut (the tree) down (the tree). (Wide focus)

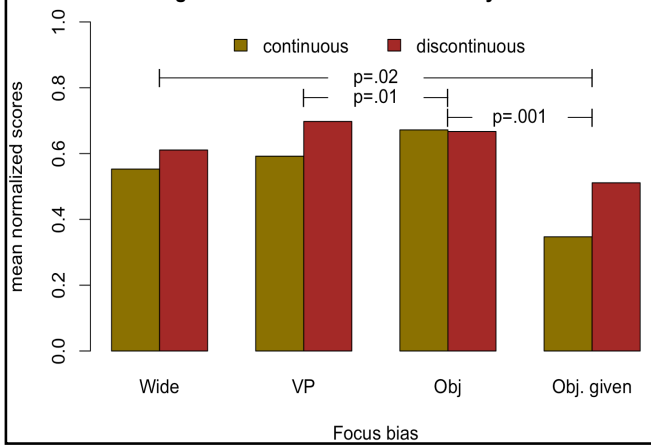
(7) Q: What did Ann cut down? A: Ann cut (the tree) down (the tree). (Obj. focus)

(8) Q: What did Ann do? A: Ann cut (the tree) down (the tree). (VP focus)

(9) Q: What happened to the tree? A: Ann cut (the tree) down (the tree). (Obj. given)

Procedure: Self-paced online (Ibex Farm) experiment. 11-point scale (0-10).

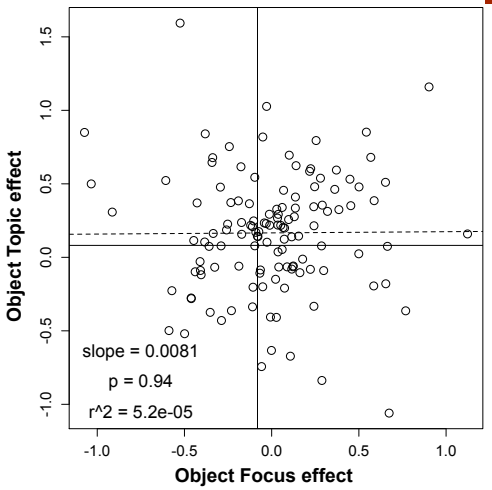
Figure 1: Mean Normalized scores by condition



Results.

- No evidence that continuous order is "neutral" (pace Dehé 2002).
- Topic effect mispredicted by Kayne (1998).
- Object focus-VP focus difference mispredicted by Dehé (2002).
- Consistent with *given before new* processing approaches (Arnold et a.l 2000).
- No cross-speaker correlation between topic and focus effects.

Figure 2: Topic and focus effects by speaker



The left periphery of PP

Three ingredients to proposal:

1. Functional structure of PP parallels that of clause, DP.

- Objects merged as specifier of variably case-deficient p head (Svenonius 2004, 2007, Levinson 2011).
- PP, like CP, vP/DP, may contain a topic layer (Rizzi 1997, Kayne 1998, Belletti 2004, Aboh et al. 2010).

(10) V $[_{TopP}$ Top … $[_{pP}$ Obj p $[_{PP}$ Prt]]

2.Topic/focus-insensitive particle movement.

- In sentence-wide focus contexts both orders are acceptable. This suggests some particle or object movement is independently available. We assume p+P incorporation to C-place (den Dikken 2010, Levinson 2011).

(11) $[_{C\text{-}placeP}$ (*down*-p-)-C $[_{pP}$ *the tree* $[_{p'}$ (*down*)-p $[_{PP}$ <*down*>]]]

- Assume particle incorporates only when p is case-deficient (den Dikken 1995)

(12) a. Pam rolled (down) the ball (down). b. Pam rolled (*down) the ball (down) the hill.

3.Grammar competition: Gradient well-formedness reflects competition between representations (Kroch 1989, 1994, Bresnan & Ford 2010, Bader & Häussler 2010, Melnick et al. 2011).

Modeling cross-speaker variation:

- **Grammar 1:** Topic, focus prosodically marked. No topic/focus movement.
- **Grammar 2:** Object topic and object focus effects.

(13) *cut* $[_{TopP}$ *down*$_{[TOP]}$ $[_{Top'}$Top $[_{C\text{-}placeP}$ *the tree*$_{[FOC]}$ <*down*>]]] (Obj. focus)

(14) *cut* $[_{TopP}$ *the tree*$_{[TOP]}$ $[_{Top'}$Top $[_{C\text{-}placeP}$ <*the tree*> *down*$_{[FOC]}$]]] (Obj. given)

(15) *cut* $[_{C\text{-}placeP}$ <(*down*) *the tree* (*down*)>] (Wide/VP focus)

- **Grammar 3**: Object topic effect, only. Particles don't scramble (Pintzuk 1991, Zeller 2003, cf. Abraham & Molnarfi 2002).

(16) *cut* $[_{TopP}$ **down*$_{[TOP]}$ $[_{Top'}$ Top $[_{C\text{-}placeP}$ *the tree*$_{[FOC]}$ <*down*>]]] (Obj. focus)

- **Grammar 4**: Object focus effect, only. Object pied-pipes C-placeP.

(17) *cut* $[_{TopP}$ *down*$_{[TOP]}$ $[_{Top'}$Top $[_{C\text{-}placeP}$ *the tree*$_{[FOC]}$ <*down*>]]] (Obj. focus)

(18) *cut* $[_{TopP}$ $[_{C\text{-}placeP}$ (*down*) *the tree*$_{[TOP]}$ (*down*)] $[_{Top'}$Top [<(*down*) *the tree* (*down*)>]]] (Obj. given)

Conclusion: The analysis better expresses topic/focus effects on word order in particle verb constructions than previous approaches (Svenonius 1996, Dehé 2002, Kayne 1998). To be explored is the possible relation of these dialects to cross-speaker variation in particle word order in double object constructions (Emonds 1976, Basilico 2008).